

REMARKS

This responds to the Office Action mailed on June 23, 2006.

Claim 2 is amended, no claims are canceled or added; as a result, claims 2, 3, 7-9, and 65-76, 78-79, 84-85, 89, 91-92 are now pending in this application.

Claim Amendments and Additions

The amendments to the claims are fully supported by the specification as originally filed, and no new matter will be added by entry of the amendment. The amendments to the claims are made to satisfy Applicant's preferences, not necessarily to satisfy any legal requirement(s) of the patent laws. The amendments clarify the claims and are not intended to limit the scope of equivalents to which any claim element may be entitled. Applicant respectfully requests reconsideration of the above-identified application in view of the amendments above and the remarks that follow.

Claim 2 has been amended to incorporate claim 78, the claim from which it previously depended.

§102 Rejection of the Claims

Claims 7, 9, 65-75, 78 and 84 were rejected under 35 USC § 102(e) as being anticipated by Dibene, II et al. (U.S. 6,452,113). This rejection is respectfully traversed.

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claims, arranged as in the claim. 35 U.S.C.A. § 102(b), Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Co., 730 F.2d 1452, C.A.Fed.,1984.

Applicants respectfully submit that independent claims 78 and 84 are not anticipated because Dibene simply fails to teach each and every claimed element, including a package stiffener/frame providing "stiffening support to the substrate."

Because all the elements of independent claims 78 and 84 are not found in Dibene, Applicants assume that the Examiner is asserting that these elements are inherent in Dibene. As recited in MPEP § 2112, "In relying upon the theory of inherency, the Examiner must provide basis in fact and/or technical reasoning to reasonably support the determination that the allegedly

inherent characteristic necessarily flows from the teachings of the applied prior art,” citing Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

Applicants respectfully submit that the Office Action has not established a *prima facie* case of inherency.

The Action does not provide basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. The Action merely stated on page 3 that:

the electrical connections/structure being functional as a mechanical support/stiffener as well as the PGID, the dual functions including mechanical functions comprising conductive interconnects providing a coupling/rigidity/support for the substrate (Col. 8, lines 50-60) and mechanical fasteners (802 in Fig. 9) proving the predetermined level of mechanical fastening/stiffening (Col. 9, lines 32-37), and

However, there is no indication in these referenced sections of Dibene ‘113 that either the interconnect device 612 or the fasteners 802 are equivalent or the same as the frame and/or package stiffener of claims 78 or 84 *providing stiffening support to the substrate*. In particular, col. 8, lines 50-60 of Dibene ‘113 actually states:

The conductive interconnect device 612 provides serves dual purposes. First, it provides mechanical coupling between the circuit board 602 and the substrate 302, providing sufficient separation between the circuit board 602 and the substrate 302. The conductive interconnect device 612 may also be configured not only to separate the circuit board 602 and the substrate 302, but with suitable attachment devices, to keep the circuit board 602 and the substrate 302 together. The other function provided by the conductive interconnect device 612 is to provide one or more conductive paths from the circuit board 602 to the substrate 302. Typically, two conductive paths are provided, including a first conductive path for a power signal and a second conductive path for a ground.

And col. 9, lines 32-37 of Dibene ‘113 actually states:

FIG. 8 is a diagram showing the modular circuit board assembly 800, including the substrate assembly 700 and the power regulation/delivery module 600. Fasteners 802 mechanically and electrically connect to the modular circuit board assembly 800 to the substrate assembly 700.

Thus, the Action does not assert that the allegedly inherent characteristic (stiffening support to the substrate) is necessary in Dibene, let alone provide a basis in fact and/or technical reasoning.

Further, Applicants respectfully submit that a package stiffener/frame providing “stiffening support to the substrate” does not necessarily flow from Dibene. For example, elements may be coupled or fastened to each other without providing stiffening support.

To serve as an anticipation when a reference is silent about the asserted inherent characteristic, the gap in the reference may be filled with recourse to extrinsic evidence of record. But, such evidence must make clear that “the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” *Continental Can Co. v. Monsanto Co.*, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991).

Because there is no evidence in the record to support such inherency assertions, the unsupported assertions appear to be personal knowledge of the Examiner. The Examiner is thus respectfully requested to submit an affidavit as required by 37 C.F.R. § 1.104(d)(2).

Without the requisite extrinsic evidence, the Office Action has not made out a *prima facie* case of anticipation. Accordingly, independent claims 78 and 84 are patentable over Dibene, and Applicants respectfully request that the rejection be withdrawn.

Reconsideration of the independent claims 78 and 84 is respectfully requested. Further, withdrawal of the rejection of these independent claims 78 and 84, as well as for all rejected claims which depend from the allowable independent claims, is respectfully requested.

Claims 7, 9, 65-75, which depend directly or indirectly from claims 78 and 84 and incorporate all of the limitations therein, are also asserted to be allowable for the reasons presented above, and Applicant respectfully requests notification of same.

Applicant considers additional elements of claims 7, 9, 65-75 to further distinguish over the cited references, and Applicant reserves the right to present arguments to this effect at a later date.

§103 Rejection of the Claims

Claims 76 and 89 were rejected under 35 USC § 103(a) as being unpatentable over Dibene, II et al. (U.S. 6,452,113) in view of Belady (U.S. 6,285,550). This rejection is respectfully traversed.

“In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed.Cir. 1991).” *M.P.E.P.* §2142. (emphasis added.)

Applicants respectfully submit that independent claim 76 is patentable over Dibene in view of Belady because the cited references simply fail to teach each and every claimed element, including a package stiffener providing “stiffening support to the substrate.”

Independent claim 76 is also asserted to be allowable for reasons similar to those presented above with regard to independent claims 78 and 84. Applicants consider elements of claim 76 to further distinguish over the cited references, and Applicants reserve the right to present arguments to this effect at a later date.

Claims 79, 85 and 92 were also rejected under 35 USC § 103(a) as being unpatentable over Dibene, II et al. (U.S. 6,452,113) in view of Hembree et al. (U.S. 2001/0001542).

Claim 91 was also rejected under 35 USC § 103(a) as being unpatentable over Dibene, II et al. (U.S. 6,452,113) and Belady, and further in view of Hembree et al.

These rejections are respectfully traversed.

Claims 79, 85, 89, 91-92 which depend directly or indirectly from claims 76, 78 and 84 and incorporate all of the limitations therein, are also asserted to be allowable for the reasons presented above, and Applicant respectfully requests notification of same.

Applicant considers additional elements of claims 79, 85, 89, 91-92 to further distinguish over the cited references, and Applicant reserves the right to present arguments to this effect at a later date.

Allowable Subject Matter

Claims 2, 3, and 8 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 2 has been rewritten into independent form including all the limitation of claim 78, the claim from which it previously depended. Claims 3, and 8 depend from independent claim 2, which is now in condition for allowance. Therefore, claims 2, 3 and 8 are now in condition for allowance.

Conclusion


Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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